In the Claims:

Sub D1

1. (Twice amended) An electronic switching apparatus for flexibly interconnecting a plurality of signal endpoints, the apparatus comprising:

a first circuit for receiving at least one input signal from at least one input endpoint, the first circuit having at least one pair of barrel shift registers coupled to at least one of the at least one input endpoint for receiving the at least one input signal, shifting and rotating the at least one input signal, and transmitting at least one output signal; and

a second circuit coupled to outputs from the first circuit for sending at least one received signal to at least one output endpoint.

C2

Sub D2

7. (Twice amended) A method for electronic signal coupling, the method comprising the steps of:

receiving a first set of digital signals, the received first set of digital signals being provided to at least one pair of barrel shift registers;

shifting and rotating the first set of digital signals; and

transmitting a second set of digital signals, the transmitted second set of digital signals being provided from a plurality of multiplexers, the plurality of multiplexers being selectably coupled to the barrel shift registers such that at least one signal selected in the first set of digital signals is selectably coupled for transmission in the second set of digital signals.

C3

14. (Once amended) A system for electronic signal coupling comprising:

means for receiving a first set of digital signals, the received first set of digital signals being provided to at least one pair of barrel shift registers;

means for shifting and rotating the first set of digital signals; and

means for transmitting a second set of digital signals, the transmitted second set of digital signals being provided from a plurality of multiplexers, the plurality of multiplexers being selectably coupled to the barrel shift registers such that at least one signal selected in the first set of digital signals is selectably coupled for transmission in the second set of digital signals.